

Serial No. 10/774,389
Docket No. PTGF-03083

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JAN 14 2008**REMARKS**

Claims 1, 3-13, and 16-23 are all the claims presently pending in the application. Claim 3 has been amended to more particularly define the invention.

No new matter is added.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant respectfully submits that, while claims 13 and 19 are noted on page 1 of the Office Action as being rejected, the rejections of claims 13 and 19 are not particularly pointed out or described in the Detailed Action portion of the Office Action. Therefore, Applicant respectfully assumes these claims to be allowed absent notification otherwise by the Examiner.

Claims 1, 3, 6-12, 16-18, and 20 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Uemura (U.S. Patent No. 6,310,364). Claims 4-5 and 21-23 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Uemura in view of Lin et al. (U.S. Patent No. 6,603,151).

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

An exemplary aspect of the claimed invention (e.g., as recited in claim 1) is directed to a light emitting apparatus including a semiconductor light emitting element including a substrate for radiating light from a light emission surface of the substrate of the light emitting element, the light emission surface provided on the substrate opposite to an electrode forming surface of the light emitting element, and an inorganic transparent structure for mounting on the light emission

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surface of the substrate, wherein the transparent structure is optically connected with the entire light emission surface, has a light distribution characteristic based on a three-dimensional shape of the transparent structure, includes a side surface through which light radiated from the light emission surface is discharged from the transparent structure, and is bonded to the substrate by a transparent adhesive layer.

Conventional light emitting apparatuses suffer from distinct drawbacks. In one conventional apparatus, phosphor and electrodes formed on the LED chip block the radiation of light. Therefore, it is difficult to obtain sufficient brightness (Application at page 3, line 19 to page 4, line 2).

On the other hand, an exemplary aspect of the claimed invention may include a light emitting apparatus wherein the transparent structure includes a side surface through which light radiated from the light emission surface is discharged from the transparent structure (Application at page 4, lines 13-24). This feature may provide a lower light emission density and a different light distribution characteristic than that obtained by a LED chip by itself. This feature may also enhance brightness by reducing a light shield effect caused by covering the LED chip with phosphor (Application at page 10, lines 19-29).

II. THE PRIOR ART REJECTIONS

A. The Uemura Reference

Uemura discloses a light-emitting device with a transparent base (Uemura at Abstract). The Examiner alleges that Uemura teaches or suggests the claimed invention. However, Applicant respectfully submits there are features of the claimed invention not taught or suggested by Uemura.

Specifically, Uemura fails to teach or suggest a light emitting apparatus "wherein the transparent structure . . . comprises a side surface through which light radiated from the light

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emission surface is discharged from the transparent structure", as recited, for example, in claim 1 (Application at page 4, lines 13-24). This feature may provide a lower light emission density and a different light distribution characteristic than that obtained by a LED chip by itself. This feature may also enhance brightness by reducing a light shield effect caused by covering the LED chip with phosphor (Application at page 10, lines 19-29).

The Examiner alleges that Figure 1 of Uemura teaches or suggests this feature (Office Action at page 2, last two lines on page). However, Figure 1 of Uemura clearly fails to teach or suggest this feature. In fact, Figure 1 of Uemura teaches against this feature.

Specifically, Figure 1 of Uemura suggests that all emissions of the light emitting element of Uemura occur from the top surface of the transparent base. Three arrows located on Figure 1 clearly are pointing in a vertical direction from the top surface of the transparent base. These arrows on Figure 1 point to the word "EMISSION".

Indeed, there are no arrows that point from the side surfaces of the transparent base in Figure 1 of Uemura and nothing within the figure that teaches or suggests that the transparent base discharges light from side surfaces. Further, there is absolutely no figure or passage of Uemura that even remotely teaches or suggests a light emitting apparatus wherein the transparent structure includes a side surface through which light radiated from the light emission surface is discharged from the transparent structure (Application at page 4, lines 13-24).

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection.

B. The Lin Reference

Lin discloses a method and a structure for packaging an electro-optics device (Lin at Abstract). The Examiner alleges that Lin can be combined with Uemura to make the invention of claims 4-5 and 21-23 obvious.

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However, Lin and Uemura would not have been combined by someone having ordinary skill in the art. Further, even assuming (arguendo) Lin was combined with Uemura, the resultant combination would not teach every feature of the invention of claims 4-5 and 21-23.

Specifically, Lin fails to teach or suggest a light emitting apparatus "wherein the transparent structure . . . comprises a side surface through which light radiated from the light emission surface is discharged from the transparent structure", as recited, for example, in claim 1 (Application at page 4, lines 13-24). This feature may provide a lower light emission density and a different light distribution characteristic than that obtained by a LED chip by itself. This feature may also enhance brightness by reducing a light shield effect caused by covering the LED chip with phosphor (Application at page 10, lines 19-29).

The Examiner relies on Figure 6A of Lin to teach that a patterned grating layer can prevent the light reflected from going back to the active layer of the light-emitting structure (Office Action at page 4, paragraph 6). However, Figure 6A of Lin clearly fails to teach or suggest a light emitting apparatus wherein the transparent structure includes a side surface through which light radiated from the light emission surface is discharged from the transparent structure (Application at page 4, lines 13-24). Further, this feature is not taught anywhere within Lin.

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1, 3-13, and 16-23, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

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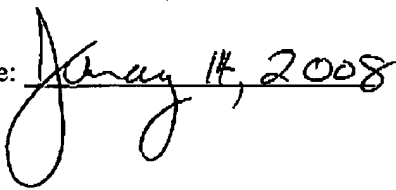
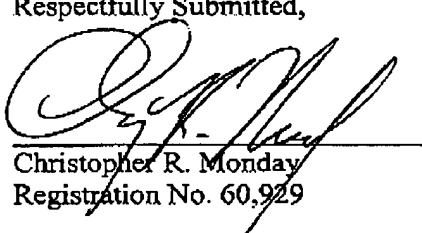
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Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date:

Handwritten signature of Christopher R. Monday, dated January 14, 2008.

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